

Multiplication

Unit Test, Form A (page 1 of 2)

Score _____ / 13

1. Multiply.

$$70 \times 80 = \underline{\hspace{2cm}}$$

$$50 \times 400 = \underline{\hspace{2cm}}$$

$$30 \times 9,000 = \underline{\hspace{2cm}}$$

$$600 \times 700 = \underline{\hspace{2cm}}$$

2. Write the missing numbers.

$$10^5 = \underline{\hspace{2cm}}$$

$$37 \times 10^2 = \underline{\hspace{2cm}}$$

$$260 \times 10^3 = \underline{\hspace{2cm}}$$

$$9 \times 10^{\boxed{}} = 90,000$$

3. Round each factor to its greatest place. Is each answer reasonable?

$$687 \times 42 = 28,854 \quad \text{Yes} \quad \text{No}$$

$$\text{Estimate } \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$834 \times 61 = 5,838 \quad \text{Yes} \quad \text{No}$$

$$\text{Estimate } \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

4. Fill in the model, then multiply.

	30	8
60		
7		

$$38 \times 67 = \underline{\hspace{2cm}}$$

5. Break apart 46 to multiply.

$$73 \times 46 = 73 \times \underline{\hspace{1cm}} + 73 \times \underline{\hspace{1cm}}$$

$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

6. Fill in the model, then multiply.

	200	40	6
50			
3			

$$246 \times 53 = \underline{\hspace{2cm}}$$

Unit Test, Form A (page 2 of 2)

— 200 —

1,710

			4	2	7
x				6	8
+					

	2	0	6	4
×			3	7
+				

rolls

marbles

Multiplication

Unit Test, Form B (page 1 of 2)

Score _____ / 13

1. Multiply.

$40 \times 90 = \underline{\hspace{2cm}}$

$60 \times 500 = \underline{\hspace{2cm}}$

$20 \times 7,000 = \underline{\hspace{2cm}}$

$300 \times 800 = \underline{\hspace{2cm}}$

2. Write the missing numbers.

$10^4 = \underline{\hspace{2cm}}$

$84 \times 10^3 = \underline{\hspace{2cm}}$

$150 \times 10^2 = \underline{\hspace{2cm}}$

$6 \times 10^{\boxed{\hspace{1cm}}} = 600,000$

3. Round each factor to its greatest place. Is each answer reasonable?

$949 \times 21 = 2,847$ Yes No

Estimate $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

$518 \times 47 = 24,346$ Yes No

Estimate $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

4. Fill in the model, then multiply.

	50	9
20		
4		

.....

.....

$59 \times 24 = \underline{\hspace{2cm}}$

5. Break apart 37 to multiply.

$85 \times 37 = 85 \times \underline{\hspace{1cm}} + 85 \times \underline{\hspace{1cm}}$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

6. Fill in the model, then multiply.

	300	50	8
70			
2			

.....

.....

$358 \times 72 = \underline{\hspace{2cm}}$

Unit Test, Form B (page 2 of 2)

$$4,231 \times 38 = 4,231 \times (\quad + \quad)$$
$$= \quad + \quad$$

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15,200

[illegible]

		1	0	4
×				7
			6	3
+				

		4	0	9
x		2	3	8
+				

boxes

trees

Multiplication

Unit Test, Form A (page 1 of 2)

Score _____ / 13

1. Multiply.

$$70 \times 80 = \underline{5,600}$$

$$50 \times 400 = \underline{20,000}$$

$$30 \times 9,000 = \underline{270,000}$$

$$600 \times 700 = \underline{420,000}$$

Lesson 3.1 · Multiply by multiples of 10, 100 and 1,000

2. Write the missing numbers.

$$10^5 = \underline{100,000}$$

$$37 \times 10^2 = \underline{3,700}$$

$$260 \times 10^3 = \underline{260,000}$$

$$9 \times 10^{\boxed{4}} = \underline{90,000}$$

Lesson 3.1 · Multiply by multiples of 10, 100 and 1,000

3. Round each factor to its greatest place. Is each answer reasonable?

$$687 \times 42 = 28,854 \quad \text{Yes} \quad \text{No}$$

$$\text{Estimate } \underline{700} \times \underline{40} = \underline{28,000}$$

$$834 \times 61 = 5,838 \quad \text{Yes} \quad \text{No}$$

$$\text{Estimate } \underline{800} \times \underline{60} = \underline{48,000}$$

Lesson 3.2 · Estimate products

4. Fill in the model, then multiply.

	30	8
60	<u>1,800</u>	<u>480</u>
7	<u>210</u>	<u>56</u>

$$38 \times 67 = \underline{2,546}$$

Lesson 3.3 · 2-digit times 2-digit

5. Break apart 46 to multiply.

$$73 \times 46 = 73 \times \underline{40} + 73 \times \underline{6}$$

One way

$$= \underline{2,920} + \underline{438} = \underline{3,358}$$

Lesson 3.3 · 2-digit times 2-digit

6. Fill in the model, then multiply.

	200	40	6
50	<u>10,000</u>	<u>2,000</u>	<u>300</u>
3	<u>600</u>	<u>120</u>	<u>18</u>

$$246 \times 53 = \underline{13,038}$$

Lesson 3.4 · 3- and 4-digit times 2-digit

Multiplication

Unit Test, Form A (page 2 of 2)

7. Break apart 47 to multiply.

$$\begin{aligned}
 2,153 \times 47 &= 2,153 \times (\underline{40} + \underline{7}) \\
 &= \underline{86,120} + \underline{15,071} \\
 &= \underline{101,191} \quad \text{One way}
 \end{aligned}$$

Lesson 3.4 · 3- and 4-digit times 2-digit

8. In the standard algorithm, circle what the second row is worth.

$$\begin{array}{r}
 57 \times 34 \\
 1,510 \\
 17,100 \\
 \hline
 1,710
 \end{array}$$

Lesson 3.5 · The standard algorithm

9. Multiply.

$$\begin{array}{r}
 \begin{array}{cc} 1 & 4 \\ 2 & 5 \end{array} \\
 \begin{array}{r}
 427 \\
 68 \\
 \hline
 3416 \\
 + 25620 \\
 \hline
 29036
 \end{array}
 \end{array}$$

Lesson 3.5 · The standard algorithm

10. Multiply.

$$\begin{array}{r}
 \begin{array}{cc} 1 & 1 \\ 4 & 2 \end{array} \\
 \begin{array}{r}
 2064 \\
 37 \\
 \hline
 14448 \\
 + 61920 \\
 \hline
 76368
 \end{array}
 \end{array}$$

Lesson 3.6 · Larger factors and zeros

11. Multiply.

$$\begin{array}{r}
 \begin{array}{cc} 1 & 2 \\ 2 & 4 \end{array} \\
 \begin{array}{r}
 306 \\
 247 \\
 \hline
 2142 \\
 12240 \\
 + 61200 \\
 \hline
 75582
 \end{array}
 \end{array}$$

Lesson 3.6 · Larger factors and zeros

12. A bakery bakes 245 rolls each day. How many rolls does it bake in 28 days?

$$245 \times 28 = 6,860$$

6,860 rolls

Lesson 3.7 · Multiplication stories

13. A store gets 24 boxes of 165 marbles. It sells 875 marbles. How many marbles are left?

$$\begin{aligned}
 24 \times 165 &= 3,960 \\
 3,960 - 875 &= 3,085
 \end{aligned}$$

One way

3,085 marbles

Lesson 3.7 · Multiplication stories

Multiplication

Unit Test, Form B (page 1 of 2)

Score _____ / 13

1. Multiply.

$$40 \times 90 = \underline{3,600}$$

$$60 \times 500 = \underline{30,000}$$

$$20 \times 7,000 = \underline{140,000}$$

$$300 \times 800 = \underline{240,000}$$

Lesson 3.1 · Multiply by multiples of 10, 100 and 1,000

2. Write the missing numbers.

$$10^4 = \underline{10,000}$$

$$84 \times 10^3 = \underline{84,000}$$

$$150 \times 10^2 = \underline{15,000}$$

$$6 \times 10^{\boxed{5}} = \underline{600,000}$$

Lesson 3.1 · Multiply by multiples of 10, 100 and 1,000

3. Round each factor to its greatest place. Is each answer reasonable?

$$949 \times 21 = 2,847 \quad \text{Yes} \quad \boxed{\text{No}}$$

$$\text{Estimate } \underline{900} \times \underline{20} = \underline{18,000}$$

$$518 \times 47 = 24,346 \quad \boxed{\text{Yes}} \quad \text{No}$$

$$\text{Estimate } \underline{500} \times \underline{50} = \underline{25,000}$$

Lesson 3.2 · Estimate products

4. Fill in the model, then multiply.

	50	9
20	<u>1,000</u>	<u>180</u>
4	<u>200</u>	<u>36</u>

$$59 \times 24 = \underline{1,416}$$

Lesson 3.3 · 2-digit times 2-digit

5. Break apart 37 to multiply.

$$85 \times 37 = 85 \times \underline{30} + 85 \times \underline{7}$$

One way

$$= \underline{2,550} + \underline{595} = \underline{3,145}$$

Lesson 3.3 · 2-digit times 2-digit

6. Fill in the model, then multiply.

	300	50	8
70	<u>21,000</u>	<u>3,500</u>	<u>560</u>
2	<u>600</u>	<u>100</u>	<u>16</u>

$$358 \times 72 = \underline{25,776}$$

Lesson 3.4 · 3- and 4-digit times 2-digit

Unit Test, Form B (page 2 of 2)

7. Break apart 38 to multiply.

$$\begin{aligned} 4,231 \times 38 &= 4,231 \times (\underline{30} + \underline{8}) \\ &= \underline{126,930} + \underline{33,848} \\ &= \underline{160,778} \end{aligned}$$

One way

One way

Lesson 3.4 · 3- and 4-digit times 2-digit

8. In the standard algorithm, circle what the second row is worth.

76 × 28

1,520

1,420

15,200

Lesson 3.5 · The standard algorithm

9. Multiply.

			3	7	
			1	3	
			5	3	9
×				8	4
		2	1	5	6
+	4	3	1	2	0
	4	5	2	7	6

Lesson 3.5 · The standard algorithm

10. Multiply.

			2	4	
			1	2	
		1	0	4	7
×				6	3
		3	1	4	1
+	6	2	8	2	0
	6	5	9	6	1

Lesson 3.6 · Larger factors and zeros

11. Multiply.

				1	
				2	
				7	
		4	0	9	
×		2	3	8	
		3	2	7	2
	1	2	2	7	0
+	8	1	8	0	0
	9	7	3	4	2

Lesson 3.6 · Larger factors and zeros

12. A truck carries **186** boxes on each trip. How many boxes does it carry in **34** trips?

$$186 \times 34 = 6,324$$

6,324 boxes

Lesson 3.7 · Multiplication stories

13. An orchard has 26 rows of 145 trees. It plants 160 more. How many trees are there now?

$$26 \times 145 = 3,770$$

$$3,770 + 160 = 3,930$$

One way

3,930 trees

Lesson 3.7 · Multiplication stories